

TRANSCO WORKSTREAM REPORT

"Revisions to cash out pricing and the methodology for recovery of OM costs"

Version 1.0

Background to The Modification Proposal

Modification Proposal 0575 was raised by a Shipper following concerns that Transco is using Operating Margins (OM) as the balancing tool of last resort without costs affecting cash-out and hence that cash-out prices on the days of OM usage are being artificially dampened.

Consistent with the Network Code, the transportation charging methodology, OM storage capacity costs are recovered through the System Operator (SO) Commodity Charge. All other costs are recovered through the balancing neutrality mechanism. As a result, all OM costs are recovered from the whole market with no targeting of the costs to those Users who might have generated the requirement for OM and its deployment.

The current treatment of costs would be appropriate if use of OM was for "system" purposes to the benefit of all system users equally. In Transco's OM report, published each year, Transco states that it holds OM in the event of the following events:

- (i) Beach supply failure;
- (ii) Late within day change in forecast demand;
- (iii) NTS Compressor failure; and
- (iv) NTS pipeline failure.

The Proposal advocates costs associated with holding and/or using OM gas for the first two categories should be targeted to the users who cause them to be incurred.

2. Description of The Modification Proposal

The Modification Proposal was as follows:

"The current OM cost recovery mechanism should be amended to improve cost targeting and provide better incentives to shippers to balance their inputs and offtakes, particularly on days of peak demand.

Criteria should be set out in the Code to determine whether Transco's use of OM gas is for "system" or "gas balancing" purposes. Transco would then use this criteria to "tag" OM use as either system or gas balancing actions.

Where OM gas is withdrawn for gas balancing purposes, the full costs of OM (including storage capacity costs, commodity costs, injection and withdrawal costs, financing costs, NTS transportation costs) should be included in the calculation of cash out prices for that gas day. The use of OM's should be deemed to be a market balancing action and the price (based

on the full costs outlined above) should be deemed to be an accepted market offer for the purposes of calculating the system marginal buy price for that Gas Day.

Where OM gas is withdrawn for system balancing purposes, the recovery of costs should continue to be made under existing Code arrangements."

The intention of the Proposal was to improve OM cost targeting for OM actions that could be deemed to be for energy balancing purposes.

3. Workstream Discussion

3.1 Workstream Discussions - 02/09/2002

Transco gave a presentation that covered the circumstances under which OM would be utilised and the triggers that might lead to those circumstances occurring. OM gas costs in 2001/2 were quantified based on the individual cost components. Utilisation over the previous three winters was covered including the number of incidents and the drivers with a detailed description of the events that lead to OM gas usage for winter 2001/2. It was noted that half of the incidents were categorised as for supply loss reasons and hence these could be deemed to be energy balancing actions under the Modification Proposal.

Modification Proposal 0575 proposes that OM usage for energy balancing purposes be treated as a trade and the unit rate be used as an input to the SMPbuy price determination. OM unit rates were calculated based on 'gas only' costs (net), currently recovered through balancing neutrality and taking account of total gas and storage costs (gross). The effect that these costs would have had on SMPbuy price on the days when OM usage was categorised as for supply loss reasons was highlighted. On three occasions the SMP would have been increased significantly but on the other occasions there would have been no impact.

A number of alternative cost targeting approaches were discussed including an approach along the lines of the Modification 0512 entry profiling charge. Transco suggested that location specific commodity charges might also be an alternative. Commodity charges are to apply to entry as well as exit flows as a result of pricing consultation paper PC73 but still at a fixed unit rate. This could be modified to make it terminal specific based on the history of supply alerts and the resulting OM booking requirement. Transco were asked to provide the volume of OM gas booked against each of the triggers. It was also noted that some of the problems that lead to both instances of OM gas usage in Winter 2001/2 were triggered by problems occurring on the previous gas day.

It was suggested that there might be potential benefit in assessing the proportion of an individual OM action that could be attributed to energy balancing. It was noted that current energy balancing regime is based on the marginal prices and hence only the unit cost of an action is relevant and not the volume of an action. It was suggested that change to the balancing mechanism or an alternative method of incorporating a proportion of a balancing action was worth consideration. Transco agreed to investigate the possibility of defining

multiple drivers for OM actions and how these could be used to set unit rates and System Marginal Prices.

The issue of how deliverability costs had been used to generate the gross OM unit costs was raised. Transco agreed to investigate calculating the OM unit costs using alternative methodologies.

3.2 Workstream Discussions - 26/09/2002

Transco gave a short presentation showing a number of different methods for calculating a trade price based on the different cost components of an OM action. The method of calculating OM requirements was described and it was shown that a significant proportion of the OM booking was attributable to supply loss and demand change - 44% from the 2001/2 figures, and these could be thought of as energy balancing triggers.

Over the last three winters there were two days when OM actions were taken for supply loss reasons when the unit cost of the actions were higher than the prevailing SMPbuy prices on the day. Whilst there were significant negative imbalance quantities on both days, the net imbalance positions were positive and were greater than the volumes of the OM actions taken. The implication of this scenario is that, had SMPbuy been reset to be three to five times greater, all Users could have potentially traded out their negative imbalances such that no User was impacted by the SMPbuy price.

It was noted that the net positive imbalance positions were likely to have been caused by supply losses experienced on the previous gas day and hence whatever method was used to incorporate OM costs into cash-out prices would not target the culprits.

Three options were presented for improved costs targeting. The first involved partial recovery by setting the SMPbuy to a proportion of the OM unit cost by using either an assessed proportion or the proportion of total OM costs that were deemed to be attributable to energy balancing (44% based on the 2001/2 booking). The consensus was that both these approaches were arbitrary. The second option involved using System Average Buy Prices to replace SMP such that extreme OM prices were smoothed. The consensus was that this was an unnecessarily extreme solution. The third approach involved the calculation of a unit rate by dividing the total daily OM costs by the gross negative imbalance quantity. The benefits of this approach were noted but the appropriateness of the cost targeting was questioned as on both the example days of significant OM usage it might have been possible to trade out all negative imbalances due to the net positive imbalance position.

A worked example of how costs could be calculated based on the approach used within the electricity regime was distributed. This example was similar to the third approach included within the presentation. The method involved calculating two components of OM cost. The 'option' component would be applied on all days and the 'action' component only on days when OM gas was utilised for energy balancing purposes. The option cost component was calculated from the space costs while the exercise cost component was calculated from the withdrawal charges. Unit costs would be calculated by dividing the costs by the on the day

net imbalance quantity and would be added to the prevailing SMPbuy. It was noted that this method might need to be revised such that costs were divided by the gross negative imbalance quantity, if the objective was to recover costs rather than just to provide storage incentives to balance.

The question was raised as to whether the method targeted those directly or indirectly responsible for the use of OM gas and hence whether it improved cost reflectivity. The main trigger for OM usage appeared to be the low opening linepack positions on a number of days. Transco agreed to further investigate the imbalance positions on the days before OM was utilised.

Ofgem commented that although the methodology didn't appear to target costs to those responsible for the actions, it could be viewed as improving general cost reflectivity on the day of an OM action.

3.3 Workstream Discussions - 08/10/2002

The principles of the methodologies underlying the option and exercise worked examples from the previous meeting were discussed.

The first methodology involved option costs based only on storage space costs. The storage space costs were apportioned to each month such that they were proportional to the maximum OM deliverability calculated for that month. A daily cost was then calculated from the monthly figure and this was then reduced in proportion to OM requirements that were deemed to be attributable to energy balancing reasons (supply loss and late demand changes). On days when OM was not used this daily space cost would be divided by the shipper net short quantity to create an option price which would then be added to the prevailing SMPbuy on the day. On days when OM was utilised an exercise cost equal to the applicable withdrawal cost would be added to the SMPbuy in addition to the option cost.

The second methodology was the same as the first methodology for days when there was no OM utilisation. On days of OM utilisation a separate cost combining option and exercise costs would be calculated. This cost involved dividing the total storage space costs for a facility by the maximum required deliverability to create a unit rate. The withdrawal cost was then added to this unit rate to create a combined option and exercise cost which replace the prevailing SMPbuy.

The Workstream recognised that the option and exercise elements might need to be opened if storage deliverability, entry capacity, storage injection and transfers, the cost of gas in storage and gas disposal costs were all to be recovered by the changes in cash out prices.

It was agreed that the current treatment of OM costs is unfocused but unless the true triggers for OM usage, and hence those responsible could be identified, then the Proposal might not generate appropriate incentives and therefore might not be an improvement. It was noted that within day problems are significant.

The Workstream noted that even if relatively few days of OM usage triggered high cash-out prices that this would have a significant effect in regime operation given the content of the changed risk profile. Extreme cash-out prices triggered by OM usage may lead to CAPEX to improve terminal reliability. Transco's view was that cash-out was purely an incentive to balance.

The Workstream noted that the key issue is whether OM is primarily likely to be used for within day or end of day purposes. It was generally acknowledged that on most occasions OM has usually been used for short term local support. Evidence supplied by Transco suggested that targeting such costs might be difficult but was worthy of consideration.

The view of the Workstream was that whilst the cash-out route was not necessarily the best vehicle for cost targeting, it was worth continuing with the development process to consider whether the Proposal could be further developed or whether fundamentally different approaches to cost targeting may be considered.

4. Conclusion

The Workstream concluded that it required further opportunities to consider alternative methods of cost targeting prior to being in the position where it could recommend proceeding to consultation. To facilitate progress it was agreed:

- AEP, as Proposer of Modification Proposal 0575, would produce suggestions in a paper ahead of the next meeting on 23 October; and
- Transco offered to produce a discussion paper covering alternative methods of cost targeting.

The Workstream requested an extension of one month to further consider development of the Proposal.